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ABSTRACT

To help assess a school's readiness for individualized instruction, the author devised the School Climate Assessment of Learning Environment (SCALE-I), a research instrument comprising 30 belief statements about aspects of individualized instruction. Informants respond to the belief statements on an attitude scale. The instrument was tested on 36 elementary and secondary teachers in southwest Missouri and 49 student teachers in elementary and secondary education at Missouri Southern State College in Joplin (Missouri). Using analysis of variance, the author compared the practicing teachers with the student teachers and the elementary teachers with the secondary teachers. The results showed that the practicing teachers as a group agreed with the student teachers on 28 of the 30 belief statements, while the elementary teachers as a group agreed with the secondary teachers on 17 of 30 statements. The author concludes that SCALE-I is a viable instrument for detecting a positive school climate for individualization of instruction. A copy of SCALE-I is appended. (RW)

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READINESS FOR INDIVIDUALIZATION OF INSTRUCTION

A SCHOOL CLIMATE ASSESSMENT PROCEDURE

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INTRODUCTION

Interpretations and definitions of individualization of instruction have varied widely among educators and others. When pressed for a definition of individualization, some answers from the past come into focus: (1) you should meet the needs of the students in your classroom, (2) take the student, as God made him, and his last teacher left him, and teach from that point forward; (3) it is a process rather than a method; and (4) each student is unique and the school should attune the system to that uniqueness.

The above definitions have served a useful purpose in education but they have done little toward helping pre-service and in-service personnel formulate a concrete definition of individualization. Moreover, the above definitions may contribute little to the formulation or plan for implementing and sustaining a procedure for individualization of instruction.

With this in mind, the author devised the School Climate Assessment of Learning Environments (SCALE-I) (see Appendix I). The instrument consists of thirty Belief Statements about individualization. Taken as a whole, these thirty Belief Statements represent the author's definition of individualization of instruction. The thirty Belief Statements are not a panacea

or the last word but an attempt to devise a systematic definition of individualization of instruction.

SCALE-I is an attitude type instrument (Likert method) consisting of thirty Belief Statements. All Belief Statements are stated in positive terms with strongly agree, agree, undecided, disagree, and strongly disagree choices. Strongly agree thru strongly disagree carry values of 5, 4, 3, 2, 1, respectively, with strongly agree or 5 being the most desirable response.

PROCEDURE

During the Fall Semester of 1981, 85 pre-service and in-service educators were polled. The sample consisted of 36 cooperating teachers (16 secondary, 20 elementary) located in southwest Missouri and 49 student teachers (19 secondary, 30 elementary) from Missouri Southern State College, Joplin, Missouri. They were administered SCALE-I and were asked to respond to the 30 Belief Statements of the instrument. No mention was made of individualization of instruction or that the 30 Belief Statements represented a definition of individualization.

SCALE-I data were analyzed using the statistic Analysis of Variance (ANOVA), Two-FactorsFactorial Design. An F-Ratio was computed for each of the 30 Belief Statements. A comparison was made between: (1) public school elementary and secondary cooperating teachers against elementary and secondary student teachers and (2) secondary cooperating teachers and student

teachers against elementary cooperating teachers and student teachers.

Answers to the following questions were sought in the study: (1) Do cooperating teachers differ significantly from student teachers in relation to the 30 Belief Statements concerning school climate and subsequently individualization of instruction? (2) Do secondary cooperating teachers and student teachers differ significantly from elementary cooperating teachers and student teachers in relation to the 30 Belief Statements concerning school climate and subsequently individualization of instruction? (3) What implications do the results of SCALE-I have for administrators, curriculum workers, teachers, and schools of education? (4) Do the results of SCALE-I indicate a favorable school climate for possible implementation of individualization of instruction or an instructional mastery system?

FINDINGS

Results of SCALE-I and subsequent analysis of data indicate that secondary and elementary cooperating teachers in this study differ significantly from secondary and elementary student teachers in only 2 of 30 belief statements. Table I shows that the significant differences occurred in Belief Statements 4 and 17. (See Figure 1).

However, Table III indicates that the overall mean for student teachers is higher (4.25) when compared to cooperating teachers (3.96). Table III gives the overall mean for each Belief Statement in each category. Note that Table III shows that the student teachers had higher means in 29 of 30 Belief Statements.

TABLE I

COMPARISON OF MEAN SCORES OF COOPERATING TEACHERS VERSUS STUDENT TEACHERS ON THE THIRTY FACTORS RELATING TO SCHOOL CLIMATE

BELIEF STATEMENT	COOPERATING TEACHERS V. STUDENT TEACHERS CT MEANS SEC	CT MEANS ELE	ST MEANS SEC	ST MEANS ELE	F-RATIO	SIGNIFICANCE
1. The unique learning styles of students are identified and used in building a student's learning program.	3.81	4.20	4.00	4.47	2.433	NS
2. The teaching style(s) of the teacher is matched with the learning style(s) of the student.	3.69	4.00	3.79	4.50	3.809	NS
3. Student interests are considered when building a unit or lesson plan.	4.31	4.25	4.37	4.63	3.371	NS
4. A student-paced instructional plan is used more often than a group paced instructional plan.	2.94	3.20	3.26	3.97	8.709	*
5. Instructional objectives used when planning instruction for a student or a group of students.	4.06	4.35	4.53	4.27	0.988	NS
6. Instructional objectives used for students that range from easiest to most difficult.	3.56	3.95	4.05	4.03	1.831	NS
7. The size of the groups in the classroom is varied. For example, students may be found working in different sized groups such as 1-1, 1-8, 1-15, 0-6, or 2-15.	3.31	4.10	3.63	4.27	2.178	NS
8. Content or subject matter is varied so as to match student learning style, ability and interest.	3.68	4.15	3.95	4.60	6.938	NS
9. Assessment procedures are varied in the classroom. For example, much use is made of the following assessment procedures: performance tests, observations, paper and pencil tests, and work samples.	4.43	4.40	4.32	4.50	0.029	NS
10. Differentiated assessment techniques have resulted in different student grouping patterns in the classroom.	3.50	3.85	3.58	4.07	0.661	NS

* Significant at the .01 Level, F-RATIO, 7.08, Degrees of Freedom: 1 and 81.
NS = Not Significant

CT = COOPERATING TEACHER
ST = STUDENT TEACHER.

CT SEC N = 16; ST SEC N = 19.
CT ELE N = 20; ST ELE N = 30.
TOTAL N = 85

BELIEF STATEMENT	CT MEANS SEC	CT MEANS ELE	ST MEANS SEC	ST MEANS ELE	F-RATIO	SIGNIFICANCE
11. The learning environment is varied for students, both inside and outside of the classroom.	4.13	4.30	3.95	4.57	0.614	NS
12. The teacher in the classroom knows all students by their first names and is concerned about their individual progress toward established goals of learning.	4.50	4.70	4.47	4.70	3.114	NS
13. Various helpers are used in the classroom such as parent volunteers, student teachers, peer tutors, clerical aides, older students, and instructional aides.	3.88	3.75	4.10	4.60	5.559	NS
14. Learning prescriptions are frequently written or used for individual students or groups of students.	3.75	3.75	3.79	4.27	2.345	NS
15. Individual progress charts are maintained for each student in the class.	3.50	3.65	3.53	4.17	2.198	NS
16. A student's schedule is varied according to time, space, and instructional materials.	3.50	3.70	3.74	4.20	2.658	NS
17. A learning cycle is frequently used for individual students or groups of students based on pre-assessment, setting objectives, identification of resources and activities, provision for instruction and post-assessment.	3.69	3.90	3.95	4.47	10.342	*
18. Learning activities are selected by the teacher which allow for discovery by students.	3.63	4.10	4.00	4.47	4.837	NS
19. Students sometimes select their own learning objectives and activities.	3.88	4.00	3.79	4.07	4.908	NS
20. Students can identify or state the objectives on which they are working or progressing.	3.44	3.90	3.63	4.20	1.708	NS
21. The teacher recognizes that students are more different than alike.	4.25	4.55	4.32	4.77	1.828	NS

BELIEF STATEMENT	CT MEANS SEC	CT MEANS ELE	ST MEANS SEC	ST MEANS ELE	F-RATIO	SIGNIFICANCE
22. A good home-school communications network is maintained by the teacher.	3.44	4.50	4.00	4.53	2.620	NS
23. A good home-school communications network is maintained by the building principal.	3.94	4.25	3.95	4.43	0.660	NS
24. Students are allowed to experience some success every day.	3.94	4.65	4.37	4.80	3.347	NS
25. Learning centers or stations are used in teaching various concepts.	3.81	4.15	3.84	4.43	1.077	NS
26. Instructional materials are varied. For example, appropriate materials are available for the slow learner as well as the fast learner.	3.81	4.30	4.00	4.57	1.756	NS
27. Activities are planned which allow students to work at their success levels rather than at their frustration levels.	3.63	4.40	4.05	4.57	2.625	NS
28. When a student completes an assignment, a test, or other task, the teacher frequently asks the question, "What does this student need to learn or do next?"	4.00	4.05	3.74	4.60	1.842	NS
29. In our school, a commitment has been made to teach students rather than subjects.	4.19	4.15	4.05	4.60	1.460	NS
30. Teachers in our school can identify resources, both people and materials, that can help them personalize and individualize instruction for students.	3.94	4.15	4.11	4.57	4.886	NS

FIGURE I

SIGNIFICANT DIFFERENCES
COOPERATING TEACHERS V. STUDENT TEACHERS

ITEM NO.	BELIEF STATEMENT	F-RATIO*
4	STUDENT PACED RATHER THAN GROUP PACED	8.709
17	LEARNING CYCLE USED	10.342

*Significant at .01 Level, F-Ratio, 7.08, df=1 and 81.

Results of SCALE-I indicate that when secondary cooperating teachers and student teachers were compared to elementary cooperating teachers and student teachers, significant differences occurred in 13 of 30 Belief Statements. Table II shows the significant differences in Belief Statements 1, 2, 5. 7. 8, 11, 17, 21, 22, 24, 26, 27, and 28. There was no significant interaction found between the groups. See Table V. Note the means and F-Ratios in Table II. Figure 2 summarizes the significant differences.

At this point, an interesting question may be asked. Why did the elementary groups differ from the secondary groups in 13 of the 30 Belief Statements? That question was not in the scope of this study and may be of interest to future investigators.

TABLE II

COMPARISON OF MEAN SCORES OF SECONDARY COOPERATING AND STUDENT TEACHERS VERSUS ELEMENTARY COOPERATING AND STUDENT TEACHERS ON THE THIRTY FACTORS RELATING TO SCHOOL CLIMATE

	SECONDARY		ELEMENTARY			
	CT MEANS	ST MEANS	CT MEANS	ST MEANS	F-RATIO	SIGNIFICA
1. The unique learning styles of students are identified and used in building a student's learning program.	3.81	4.00	4.20	4.47	7.134	*
2. The teaching style(s) of the teacher is matched with the learning style(s) of the student.	3.69	3.79	4.00	4.50	8.882	*
3. Student interests are considered when building a unit or lesson plan.	4.31	4.37	4.25	4.63	0.962	NS
4. A student-paced instructional plan is used more often than a group paced instructional plan.	2.94	3.26	3.20	3.97	6.974	NS
5. Instructional objectives used when planning instruction for a student or a group of students.	4.06	4.53	4.35	4.27	7.551	*
6. Instructional objectives used for students that range from easiest to most difficult.	3.56	3.95	3.95	4.60	0.788	NS
7. The size of the groups in the classroom is varied. For example, students may be found working in different sized groups such as 1-1, 1-8, 1-15, 0-6, or 2-15.	3.31	3.63	4.10	4.27	14.966	*
8. Content or subject matter is varied so as to match student learning style, ability and interest.	3.68	3.95	4.15	4.60	14.644	*
9. Assessment procedures are varied in the classroom. For example, much use is made of the following assessment procedures: performance tests, observations, paper and pencil tests, and work samples.	4.43	4.32	4.40	4.50	0.821	NS
10. Differentiated assessment techniques have resulted in different student grouping patterns in the classroom.	3.50	3.58	3.85	4.07	3.663	NS

*Significant at the .01 Level, F-RATIO, 7.08, Degrees of Freedom: 1 and 81.
NS = Not Significant

CT SEC N = 16; ST SEC N = 19.
CT ELE N = 20; ST ELE N = 30.
TOTAL N = 85

CT = COOPERATING TEACHER
ST = STUDENT TEACHER.

BELIEF STATEMENT	CT MEANS	ST MEANS	CT MEANS	ST MEANS	F-RATIO	SIGNIFICANCE
11. The learning environment is varied for students, both inside and outside of the classroom.	4.13	3.95	4.30	4.57	10.176	*
12. The teacher in the classroom knows all students by their first names and is concerned about their individual progress toward established goals of learning.	4.50	4.47	4.70	4.70	2.097	NS
13. Various helpers are used in the classroom such as parent volunteers, student teachers, peer tutors, clerical aides, older students, and instructional aides.	3.88	4.10	3.75	4.60	1.045	NS
14. Learning prescriptions are frequently written or used for individual students or groups of students.	3.75	3.79	3.75	4.27	1.759	NS
15. Individual progress charts are maintained for each student in the class.	3.50	3.53	3.65	4.17	3.781	NS
16. A student's schedule is varied according to time, space, and instructional materials.	3.50	3.74	3.70	4.20	2.139	NS
17. A learning cycle is frequently used for individual students or groups of students based on pre-assessment, setting objectives, identification of resources and activities, provision for instruction and post-assessment.	3.69	3.95	3.90	4.47	8.125	*
18. Learning activities are selected by the teacher which allow for discovery by students.	3.63	4.00	4.10	4.47	7.054	NS
19. Students sometimes select their own learning objectives and activities.	3.88	3.79	4.00	4.07	0.993	NS
20. Students can identify or state the objectives on which they are working or progressing.	3.44	3.63	3.90	4.20	6.088	NS
21. The teacher recognizes that students are more different than alike.	4.25	4.32	4.55	4.77	8.801	*

BELIEF STATMENT	CT MEANS	ST MEANS	CT MEANS	ST MEANS	F-RATIO	SIGNIFICANCE
22. A good home-school communications network is maintained by the teacher.	3.44	4.00	4.50	4.53	17.822	*
23. A good home-school communications network is maintained by the building principal.	3.94	3.95	4.25	4.43	6.430	NS
24. Students are allowed to experience some success every day.	3.94	4.37	4.65	4.80	11.938	*
25. Learning centers or stations are used in teaching various concepts.	3.81	3.84	4.15	4.43	6.310	NS
26. Instructional materials are varied. For example, appropriate materials are available for the slow learner as well as the fast learner.	3.81	4.00	4.30	4.57	7.377	*
27. Activities are planned which allow students to work at their success levels rather than at their frustration levels.	3.63	4.05	4.40	4.57	11.198	*
28. When a student completes an assignment, a test, or other task, the teacher frequently asks the question, "What does this student need to learn or do next?"	4.00	3.74	4.05	4.60	8.710	*
29. In our school, a commitment has been made to teach students rather than subjects.	4.19	4.05	4.15	4.60	2.830	NS
30. Teachers in our school can identify resources, both people and materials, that can help them personalize and individualize instruction for students.	3.94	4.11	4.15	4.57	5.905	NS

FIGURE 2

SIGNIFICANT DIFFERENCES
SECONDARY COOPERATING TEACHERS-STUDENT TEACHERS
V.
ELEMENTARY COOPERATING TEACHERS-STUDENT TEACHERS

ITEM NO.	BELIEF STATEMENT	F-RATIO*
1	LEARNING STYLES IDENTIFIED/USED	7.134
2	TEACHING STYLE MATCHED	8.882
5	INSTRUCTIONAL OBJECTIVES USED	7.551
7	SIZE OF GROUPS VARIED	14.966
8	ASSESSMENT PROCEDURES VARIED	14.644
11	LEARNING ENVIRONMENT VARIED	10.176
17	LEARNING CYCLE USED	8.125
21	STUDENTS MORE DIFFERENT THAN ALIKE	8.801
22	HOME-SCHOOL COMMUNICATIONS, TEACHER	7.822
24	LEARNING STATIONS USED	11.938
26	INSTRUCTIONAL MATERIALS VARIED	7.377
27	SUCCESS LEVELS USED, NOT FRUSTRATION LEVELS	11.198
28	WHAT DOES STUDENT NEED TO DO NEXT ?	8.710

*Significant at .01 Level, F-Ratio, 7.08, df=1 and 81.

Table IV compares secondary cooperating and student teachers with elementary cooperating and student teachers. Note that the overall mean for the elementary groups is 4.27 compared to 3.88 for the secondary groups. Both elementary groups had higher mean scores than the secondary teacher groups. Figure 3 gives a brief comparison among the groups.

FIGURE 3

COMPARISON OF MEANS

SECONDARY CT MEAN	3.78	ELEMENTARY CT MEAN	4.11
SECONDARY ST MEAN	3.98	ELEMENTARY ST MEAN	4.43
OVERALL MEAN	3.88	OVERALL MEAN	4.27

CT=Cooperating Teacher
ST=STUDENT TEACHER

Both secondary and elementary student teachers achieved higher mean scores than their secondary and elementary counterparts.

Two interesting questions may be asked here: (1) Why did the student teachers achieve higher means in relation to the Belief Statements than did the cooperating teachers? (2) Why did the elementary groups (both student teachers and cooperating teachers) achieve higher means in relation to the Belief Statements than did the two secondary groups? The answers to the above two questions are not in the scope of this study. However, future investigation may reveal some insights into these questions.

TABLE III

COMPARISON OF OVERALL MEANS
COOPERATING TEACHERS V. STUDENT TEACHERS

BELIEF STATEMENT	OVERALL MEAN CT SEC-ELE	OVERALL MEAN ST SEC-ELE
1. LEARNING STYLES IDENTIFIED	4.03	4.29
2. TEACHING/LEARNING STYLES MATCHED	3.86	4.22
3. STUDENT INTERESTS CONSIDERED	4.28	4.53
4. STUDENT PACED PLAN	3.08	3.57
5. USE OF OBJECTIVES	4.22	4.37
6. OBJECTIVES-EASY TO DIFFICULT	3.77	4.04
7. SIZE OF GROUP VARIED	3.75	4.02
8. CONTENT VARIED	4.06	4.35
9. ASSESSMENT VARIED	4.42	4.43
10. DIFFERENT GROUPINGS	3.67	3.88
11. ENVIRONMENT VARIED	4.22	4.37
12. TEACHER KNOWS STUDENTS	4.62	4.61
13. HELPERS ARE VARIED	3.69	4.41
14. PRESCRIPTIONS USED	3.75	4.08
15. PROGRESS CHARTS	3.58	3.92
16. SCHEDULE IS VARIED	3.61	4.02
17. LEARNING CYCLE USED	3.81	4.18
18. ALLOWS FOR DISCOVERY	3.89	4.29
19. STUDENTS SELECT OBJECTIVES	3.94	3.96
20. STUDENTS CAN STATE OBJECTIVES	3.67	3.98
21. MORE DIFFERENT THAN ALIKE	4.42	4.59
22. HOME-SCHOOL COMMO, TEACHER	4.03	4.29
23. HOME-SCHOOL COMMO, PRINCIPAL	4.11	4.33
24. EXPERIENCE SUCCESS DAILY	4.33	4.63
25. LEARNING CENTERS USED	4.00	4.20
26. MATERIALS ARE VARIED	4.08	4.35
27. SUCCESS LEVELS NOT FRUSTRATION LEVELS	4.00	4.37
28. WHAT DOES STUDENT DO NEXT?	4.03	4.27
29. TEACH STUDENTS NOT SUBJECTS	4.17	4.39
30. IDENTIFY RESOURCES	4.06	4.39
	OVERALL $\bar{x}$=3.96	OVERALL $\bar{x}$=4.25

CT = COOPERATING TEACHERS
ST = STUDENT TEACHERS

NOTE: The above Belief Statements have been shortened. For the full statement, refer to TABLE-I

TABLE IV

COMPARISON OF OVERALL MEANS
ALL SECONDARY v. ALL ELEMENTARY

BELIEF STATEMENT	OVERALL MEAN FOR CT-ST SEC-SEC		OVERALL MEAN FOR CT-ST ELE-ELE		AGGREGATE MEAN
1. LEARNING STYLES IDENTIFIED	3.81	4.00	4.20	4.47	4.12
2. TEACHING/LEARNING STYLES MATCHED	3.69	3.79	4.00	4.50	3.99
3. STUDENT INTERESTS CONSIDERED	4.31	4.37	4.25	4.63	4.39
4. STUDENT PACED PLAN	2.94	3.26	3.20	3.97	3.34
5. USE OF OBJECTIVES	4.06	4.53	4.35	4.27	4.30
6. OBJECTIVES-EASY TO DIFFICULT	3.56	4.05	3.95	4.03	3.90
7. SIZE OF GROUP VARIED	3.31	3.63	4.10	4.27	3.83
8. CONTENT VARIED	3.68	3.95	4.15	4.60	4.10
9. ASSESSMENT VARIED	4.43	4.32	4.40	4.50	4.41
10. DIFFERENT GROUPINGS	3.50	3.58	3.85	4.07	3.75
11. ENVIRONMENT VARIED	4.13	3.95	4.30	4.57	4.24
12. TEACHER KNOWS STUDENTS	4.50	4.47	4.70	4.70	4.59
13. HELPERS ARE VARIED	3.88	4.10	3.75	4.60	4.08
14. PRESCRIPTIONS USED	3.75	3.79	3.75	4.27	3.89
15. PROGRESS CHARTS	3.50	3.53	3.65	4.17	3.71
16. SCHEDULE IS VARIED	3.50	3.74	3.70	4.20	3.79
17. LEARNING CYCLE USED	3.69	3.95	3.90	4.47	4.00
18. ALLOWS FOR DISCOVERY	3.63	4.00	4.10	4.47	4.05
19. STUDENTS SELECT OBJECTIVES	3.88	3.79	4.00	4.07	3.94
20. STUDENTS CAN STATE OBJECTIVES	3.44	3.63	3.90	4.20	3.79
21. MORE DIFFERENT THAN ALIKE	4.25	4.32	4.55	4.77	4.47
22. HOME-SCHOOL COMMO, TEACHER	3.44	4.00	4.50	4.53	4.12
23. HOME-SCHOOL COMMO, PRINICIPAL	3.94	3.95	4.25	4.03	4.14
24. EXPERIENCE SUCCESS DAILY	3.94	4.37	4.65	4.80	4.44
25. LEARNING CENTERS USED	3.81	3.84	4.15	4.43	4.06
26. MATERIALS ARE VARIED	3.81	4.00	4.30	4.57	4.18
27. SUCCESS LEVELS NOT FRUSTRATION LEVELS	3.63	4.05	4.40	4.57	4.16
28. WHAT DOES STUDENT DO NEXT?	4.00	3.74	4.05	4.60	4.10
29. TEACH STUDENTS NOT SUBJECTS	4.19	4.05	4.15	4.60	4.25
30. IDENTIFY RESOURCES	3.94	4.11	4.15	4.57	4.19
	CT $\bar{x}$=3.78	ST $\bar{x}$=3.98	CT $\bar{x}$=4.11	ST $\bar{x}$=4.43	4.08

OVERALL SEC $\bar{x}$=3.88 OVERALL ELE $\bar{x}$= 4.27

CT = COOPERATING TEACHERS
ST = STUDENT TEACHERS

NOTE: The above Belief Statements have been shortened. For the full statement, refer to TABLE-I

TABLE V

INTERACTION F(1X2)

BELIEF STATEMENT	F-RATIO
1. LEARNING STYLES IDENTIFIED	.3892
2. TEACHING/LEARNING STYLES MATCHED	.5032
3. STUDENT INTERESTS CONSIDERED	1.1230
4. STUDENT PACED PLAN	.3107
5. USE OF OBJECTIVES	3.252
6. OBJECTIVES-EASY TO DIFFICULT	.9878
7. SIZE OF GROUP VARIED	-.4366
8. CONTENT VARIED	-.7512
9. ASSESSMENT VARIED	1.0869
10. DIFFERENT GROUPINGS	-.0722
11. ENVIRONMENT VARIED	2.4808
12. TEACHER KNOWS STUDENTS	.0170
13. HELPERS ARE VARIED	1.2424
14. PRESCRIPTIONS USED	.9584
15. PROGRESS CHARTS	.8087
16. SCHEDULE IS VARIED	2.1645
17. LEARNING CYCLE USED	.14519
18. ALLOWS FOR DISCOVERY	-.6152
19. STUDENTS SELECT OBJECTIVES	.1352
20. STUDENTS CAN STATE OBJECTIVES	-.2802
21. MORE DIFFERENT THAN ALIKE	.1113
22. HOME-SCHOOL COMMO, TEACHER	1.3312
23. HOME-SCHOOL COMMO, PRINCIPAL	.0549
24. EXPERIENCE SUCCESS DAILY	.0413
25. LEARNING CENTERS USED	.1255
26. MATERIALS ARE VARIED	-.2330
27. SUCCESS LEVELS NOT FRUSTRATION LEVELS	-.1613
28. WHAT DOES STUDENT DO NEXT?	4.7264
29. TEACH STUDENTS NOT SUBJECTS	2.3571
30. IDENTIFY RESOURCES	.0824

NOTE: There was no significant interaction found between the groups in the study F(1x2).

The above Belief Statements have been shortened. For the full statement, refer to TABLE-I

IMPLICATIONS FOR ADMINISTRATORS, CURRICULUM WORKERS, TEACHERS, AND SCHOOLS OF EDUCATION

The implications of the results of SCALE-I and the thirty Belief Statements indicate that based on 15 significant differences out of 60 comparisons, an aggregate mean of 4.08 for all four groups, and the favorable mean scores for the four secondary and elementary groups, the school climate for individualization of instruction seems bright for the population of this study. The likelihood of implementation of individualization seems stronger at the elementary level than at the secondary level.

The study indicated that the four groups agreed with the thirty Belief Statements. It is encouraging that they agreed with the Belief Statements. Following up on identified beliefs and putting them into practice may be more difficult. However, if one believes in certain educational concepts or factors, then there is a likelihood or hope that implementation of individualization could follow if there were such positive factors as: (1) administrative (both central office and building level) encouragement and support--both moral and financial; (2) identification of key administrators, consultants, and teachers with expertise who could coordinate and direct the individualization implementation; (3) strong building principal support via educational expertise, reinforcement,

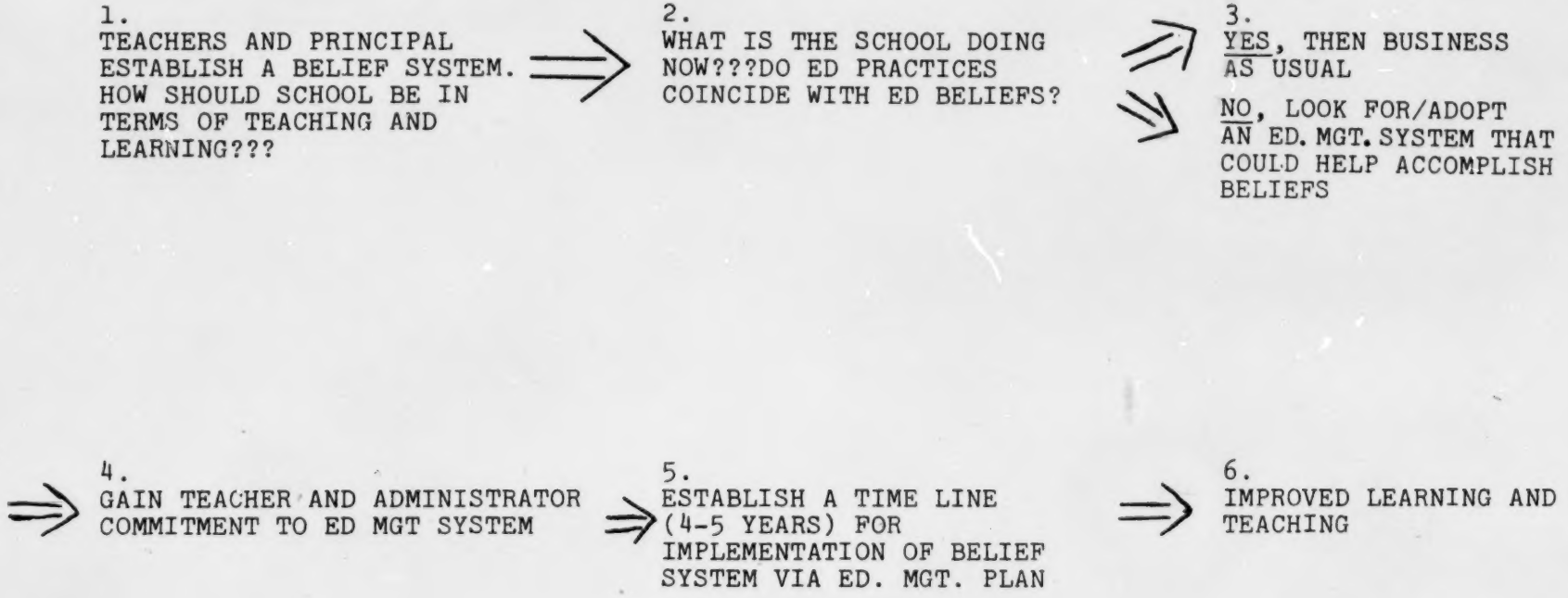
and an ongoing and sustained in-service training program; (4) strong pre-service college programs that model strategies for individualization of instruction; and (5) teacher and administrator commitment.

Figure 4 illustrates the progress of a belief system and what it could accomplish for a school or school district.

For this study, SCALE-I proved to be a viable instrument for detecting a positive school climate for individualization of instruction. Hopefully, SCALE-I could be used in the future for other populations when investigating school climate.

FIGURE 4

ESTABLISHING BELIEFS


1.
TEACHERS AND PRINCIPAL ESTABLISH A BELIEF SYSTEM. HOW SHOULD SCHOOL BE IN TERMS OF TEACHING AND LEARNING???
2.
WHAT IS THE SCHOOL DOING NOW???DO ED PRACTICES COINCIDE WITH ED BELIEFS?
3.
YES, THEN BUSINESS AS USUAL
NO, LOOK FOR/ADOPT AN ED. MGT. SYSTEM THAT COULD HELP ACCOMPLISH BELIEFS
4.
GAIN TEACHER AND ADMINISTRATOR COMMITMENT TO ED MGT SYSTEM
5.
ESTABLISH A TIME LINE (4-5 YEARS) FOR IMPLEMENTATION OF BELIEF SYSTEM VIA ED. MGT. PLAN
6.
IMPROVED LEARNING AND TEACHING

SUMMARY

A thirty item instrument, representing Belief Statements about individualization of instruction, School Climate Assessment of Learning Environments (SCALE-I), was administered to 85 educators during the Fall Semester, 1981. The 30 items from SCALE-I represented the author's definition of individualization of instruction. Included in the above sample were 36 cooperating teachers and 49 student teachers.

The Two-Factors Factorial Design, Analysis of Variance (ANOVA) was utilized in analyzing the data. Findings from the study were:

(1) When comparing the cooperating teachers against the student teachers, 2 of 30 comparisons indicated significance at the .01 level, using the F-Ratio.

(2) When comparing all secondary personnel against all elementary personnel 13 of 30 comparisons indicated significance at the .01 level, using the F-Ratio.

(3) Overall means from SCALE-I were higher for both elementary and secondary student teachers when compared to elementary and secondary cooperating teachers.

(4) Overall means from SCALE-I were higher for elementary cooperating teachers and elementary student teachers when compared to secondary cooperating teachers and secondary student teachers.

(5) The results from SCALE-I revealed a favorable school climate for the population studied. This may indicate that the groups studied may be ready for implementation of individualization of instruction.

APPENDIX I
SCHOOL CLIMATE ASSESSMENT OF LEARNING ENVIROMENTS

SCALE-I

1. The unique learning styles of students are identified and used in building a student's learning program.

_____SA _____A _____U _____D _____SD

2. The teaching style(s) of the teacher is matched with the learning style(s) of the student.

_____SA _____A _____U _____D _____SD

3. Student interests are considered when building a unit or lesson plan.

_____SA _____A _____U _____D _____SD

4. A student-paced instructional plan is used more often than a group-paced instructional plan.

_____SA _____A _____U _____D _____SD

5. Instructional objectives are used when planning instruction for a student or a group of students.

_____SA _____A _____U _____D _____SD

6. Instructional objectives are used for students that range from easiest to most difficult.

_____SA _____A _____U _____D _____SD

7. The size of the groups in the classroom is varied. For example, students may be found working in different sized groups such as 1-1, 1-8, 1-15, 0-6, or 2-15.

_____SA _____A _____U _____D _____SD

8. Content or subject matter is varied so as to match student learning style, ability, and interest.

_____SA _____A _____U _____D _____SD

9. Assessment procedures are varied in the classroom. For example much use is made of the following assessment procedures: performance tests, observations, paper and pencil tests, and work samples.

10. Differentiated assessment techniques have resulted in different student grouping patterns in the classroom.

_____SA _____A _____U _____D _____SD

11. The learning environment is varied for students, both inside and outside of the classroom.

_____SA _____A _____U _____D _____SD

12. The teacher in the classroom knows all students by their first names and is concerned about their individual progress toward established goals of learning.

_____SA _____A _____U _____D _____SD

13. Various helpers are used in the classroom such as parent volunteers, student teachers, peer tutors, clerical aides, older students, and instructional aides.

_____SA _____A _____U _____D _____SD

14. Learning prescriptions are frequently written or used for individual students or groups of students.

_____SA _____A _____U _____D _____SD

15. Individual progress charts are maintained for each student in the class.

_____SA _____A _____U _____D _____SD

16. A student's schedule is varied according to time, space, and instructional materials.

_____SA _____A _____U _____D _____SD

17. A learning cycle is frequently used for individual students or groups of students based on pre-assessment; setting objectives, identification of resources and activities, provision for instruction, and conducting a post-assessment.

_____SA _____A _____U _____D _____SD

18. Learning activities are selected by the teacher which allow for discovery by students.

_____SA _____A _____U _____D _____SD

19. Students sometimes select their own learning objectives and activities.

_____SA _____A _____U _____D _____SD

20. Students can identify or state the objectives on which they are working or progressing.

_____SA _____A _____U _____D _____SD

21. The teacher recognizes that students are more different than alike.

_____SA _____A _____U _____D _____SD

22. A good home-school communications network is maintained by the teacher.

_____SA _____A _____U _____D _____SD

23. A good home-school communications network is maintained by the building principal.

_____SA _____A _____U _____D _____SD

24. Students are allowed to experience some success every day.

_____SA _____A _____U _____D _____SD

25. Learning centers or stations are used in teaching various concepts.

_____SA _____A _____U _____D _____SD

26. Instructional materials are varied. For example, appropriate materials are available for the slow learner as well as the fast learner.

_____SA _____A _____U _____D _____SD

27. Activities are planned which allow students to work at their success levels rather than at their frustration levels.

_____SA _____A _____U _____D _____SD

28. When a student completes an assignment, a test, or other task, the teacher frequently asks the question,"What does this student need to learn or do next?"

_____SA _____A _____U _____D _____SD

29. In our school, a commitment has been made to teach students instead of subjects.

_____SA _____A _____U _____D _____SD

30. Teachers in our school can identify resources, both people and materials, that can help them personalize and individualize instruction for students.

_____SA _____A _____U _____D _____SD

APPENDIX-II
DATA SHEET

#1	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 3.81 SD .834 N 16	M 4.00 SD .882 N 19
ELE	M 4.20 SD .523 N 20	M 4.47 SD .776 N 30

#2	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 3.69 SD 1.30 N 16	M 3.79 SD .976 N 19
ELE	M 4.00 SD .324 N 20	M 4.50 SD .682 N 30

#3	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 4.31 SD .209 N 16	M 4.37 SD .831 N 19
ELE	M 4.25 SD .716 N 20	M 4.63 SD .556 N 30

#4	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 2.94 SD 1.18 N 16	M 3.26 SD 1.33 N 19
ELE	M 3.20 SD .864 N 20	M 3.97 SD .414 N 30

#5	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 4.06 SD .929 N 16	M 4.53 SD .513 N 19
ELE	M 4.35 SD .671 N 20	M 4.27 SD .640 N 30

#6	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 3.56 SD .964 N 16	M 4.05 SD .705 N 19
ELE	M 3.95 SD .945 N 20	M 4.03 SD .850 N 30

#7	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 3.31 SD .873 N 16	M 3.63 SD .955 N 19
ELE	M 4.10 SD .447 N 20	M 4.27 SD .944 N 30

#8	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 3.68 SD .946 N 16	M 3.95 SD .911 N 19
ELE	M 4.15 SD .745 N 20	M 4.60 SD .203 N 30

#9	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 4.43 SD .512 N 16	M 4.32 SD .478 N 19
ELE	M 4.40 SD .598 N 20	M 4.50 SD .227 N 30

#10	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 3.50 SD .632 N 16	M 3.58 SD .961 N 19
ELE	M 3.85 SD 1.54 N 20	M 4.07 SD .828 N 30

#11	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 4.13 SD .342 N 16	M 3.95 SD .848 N 19
ELE	M 4.30 SD .470 N 20	M 4.57 SD .626 N 30

#12	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 4.50 SD .516 N 16	M 4.47 SD .772 N 19
ELE	M 4.70 SD .470 N 20	M 4.70 SD .794 N 30

#13	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 3.88 SD .806 N 16	M 4.10 SD 1.59 N 19
ELE	M 3.75 SD 1.21 N 20	M 4.60 SD .932 N 30

#14	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 3.75 SD .856 N 16	M 3.79 SD .918 N 19
ELE	M 3.75 SD 1.07 N 20	M 4.27 SD 1.05 N 30

#15	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 3.50 SD 1.10 N 16	M 3.53 SD 1.02 N 19
ELE	M 3.65 SD 1.04 N 20	M 4.17 SD 1.02 N 30

#16	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 3.50 SD 1.21 N 16	M 3.74 SD .872 N 19
ELE	M 3.70 SD 1.42 N 20	M 4.20 SD 1.06 N 30

#17	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 3.69 SD .403 N 16	M 3.95 SD .848 N 19
ELE	M 3.90 SD .308 N 20	M 4.47 SD .776 N 30

#18	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 3.63 SD .885 N 16	M 4.00 SD 1.00 N 19
ELE	M 4.10 SD 912 N 20	M 4.47 SD .629 N 30

#19	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 3.88 SD .619 N 16	M 3.79 SD .918 N 19
ELE	M 4.00 SD .918 N 20	M 4.07 SD 1.14 N 30

#20	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 3.44 SD 1.09 N 16	M 3.63 SD 1.07 N 19
ELE	M 3.90 SD .968 N 20	M 4.20 SD .887 N 30

#21	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 4.25 SD .775 N 16	M 4.32 SD .749 N 19
ELE	M 4.55 SD .510 N 20	M 4.77 SD .430 N 30

#22	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 3.44 SD 1.09 N 16	M 4.00 SD .875 N 19
ELE	M 4.50 SD .513 N 20	M 4.53 SD .819 N 30

#23	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 3.94 SD .574 N 16	M 3.95 SD 1.13 N 19
ELE	M 4.25 SD .639 N 20	M 4.43 SD .540 N 30

#24	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 3.94 SD 1.24 N 16	M 4.37 SD .831 N 19
ELE	M 4.65 SD .489 N 20	M 4.80 SD .407 N 30

#25	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 3.81 SD .981 N 16	M 3.84 SD .898 N 19
ELE	M 4.15 SD .780 N 20	M 4.43 SD .898 N 30

#26	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 3.81 SD 1.17 N 16	M 4.00 SD 1.00 N 19
ELE	M 4.30 SD .801 N 20	M 4.57 SD .774 N 30

#27	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 3.63 SD 1.09 N 16	M 4.05 SD 1.01 N 19
ELE	M 4.40 SD .773 N 20	M 4.37 SD .728 N 30

#28	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 4.00 SD .730 N 16	M 3.74 SD 1.05 N 19
ELE	M 4.05 SD .945 N 20	M 4.60 SD .498 N 30

#29	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 4.19 SD .544 N 16	M 4.05 SD .911 N 19
ELE	M 4.15 SD 1.09 N 20	M 4.60 SD .675 N 30

#30	PUBLIC SCHOOL	STUDENT TEACHER
SEC	M 3.94 SD .443 N 16	M 4.11 SD .809 N 19
ELE	M 4.15 SD .745 N 20	M 4.57 SD .678 N 30

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